

6.35/11(12) kV EQL
1. Design guidelines.

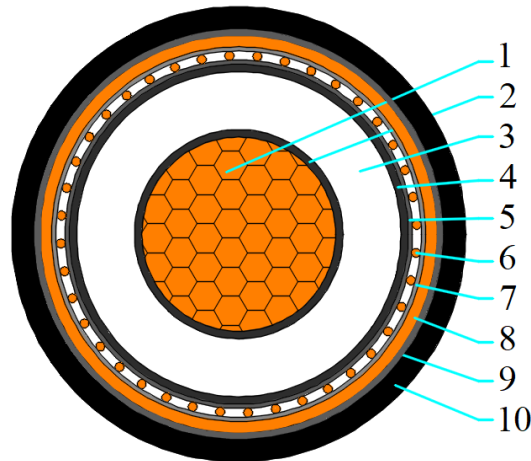
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and including 19/33(36) kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

2. Application.

Normal use operating temperature	90°C
Max. conductor temperature during short circuit(5s)	250°C
Lowest recommended temperature during installation	0°C

3. Construction.

HCA - 400mm² x 1 Core Cu/TR-XLPE/WBT/CWS(13.1kA)/WBT/PVC/NY/MDPE(Graphite) 11kV - HCA2429918EQL



1	Conductor	Class 2, circular compacted Copper conductor
2	Conductor screen	Semi-conductive compound
3	Insulation	TR-XLPE
4	Insulation screen	Semi-conductive compound
5	Bedding tape	Semi-conductive water-blocking tape
6	Metallic screen	Plain annealed copper wire screen
7	Binder tape	Water-blocking tape
8	Inner sheath	5V-90 Orange
9	Insect protection	Nylon 12
10	Outer sheath	MDPE Black with Graphite coating on the outer surface

4. Core identification and mark as listed below, or as purchase order.

Identification of core: Natural
Marking on cable: by printing in two diametrically opposed lines on the surface of outer sheath
HENGTONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE ERGON 454 6.35/11kV 400mm ² 1 core Cu TR-XLPE WBT CWS(13.1kA) WBT PVC NY MDPE XXXXm



**TECHNICAL DATA SHEET
HENGTONG CABLE AUSTRALIA**

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5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Copper
Nominal cross-sectional area	mm ²	400
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	23.4
Conductor screen		
Min. thickness at any point	mm	0.3
Approx. diameter of conductor screen	mm	24.9
Active Insulation		
Material	-	TR-XLPE
Nominal thickness/Min. thickness at any point	mm	3.4/2.96
Approx. diameter over insulation	mm	31.7
Insulation screen		
Type	-	Hand-strippable
Min. thickness at any point	mm	0.6
Approx. diameter of insulation screen	mm	33.2
Metallic screen		
No.& Diameter of copper wires per phase	No./mm	40/1.70
Approx. diameter of metallic screen	mm	37.5
Inner sheath		
Material	-	5V-90
Nominal thickness/Min. thickness at any point	mm	1.1/0.68
Approx. diameter of inner sheath	mm	42.9
Insect protection		
Material	-	Nylon 12
Min. thickness at any point	mm	0.8
Approx. diameter over Insect protection	mm	45.9
Outer sheath		
Material	-	MDPE
Nominal thickness/Min. thickness at any point	mm	1.1/0.68
Approx. diameter of outer sheath	mm	49.9
Max. diameter of cable	mm	52.4
Approx. mass of cable	kg/km	5,712
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.0470
Max. A.C. resistance of conductor at 90°C	Ω/km	0.0625
Fault current carrying capacity of conductor	kA/1sec	57.2
Fault current carrying of screen	kA/1sec	13.1



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Description	Unit	Values
Mechanical data		
Maximum pulling tension of conductor	kN	27.2
Min. bending radius during installation	mm	1370
Min. bending radius after installed	mm	910